

## ABSTRACT OF THE DISCLOSURE

### METHOD, APPARATUS, AND PROGRAM TO DETERMINE THE MUTABILITY OF AN OBJECT AT LOADING TIME

A mutability mechanism is provided for parsing an object at loading time. The mutability mechanism inserts a property into the object that indicates whether or not the object is immutable. The mutability mechanism looks at the code for the object and determines whether any other objects can modify the object. If the object cannot be modified after it is created, then the new property is set to indicate that the object is immutable; otherwise, the property is set to indicate that the object is mutable. This property can be inspected at runtime when a call is made to a program object. If an object passed as an argument is marked mutable, a clone of this object must be passed to the callee. However, if an object passed as an argument is marked immutable, a simple reference to the object may be passed as an argument to the callee.